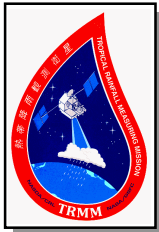


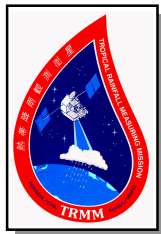
TRMM Monthly Status Briefing

August 2nd, 2000



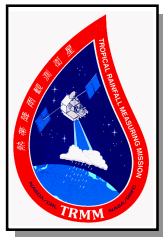
FOT Overview

- Operations Status - Engineering Staff
 - Flight Ops Summary - Lou Kurzmilller
 - Training, Electrical, & Thermal - Andy Calloway
 - ACS & FDS / C&DH - Mark Fioravanti
 - RCS & RF / Comm - Robert Bote
 - Power and Deployables - Justin Knavel
 - CERES & VIRS - Mark Fioravanti
 - LIS, TMI, & PR - Andy Calloway
 - Ground System - Andy Calloway
 - Upcoming Activities - Andy Calloway



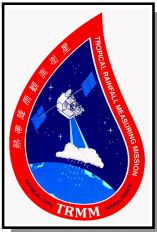
Flight Operations Summary

- Supported 556 SN events in July
 - 2 Yaw Maneuvers
 - 9 Delta-V Maneuvers
- 6 Event Rpts & 2 Generic Late Acq Rpts generated
 - ER #185: Neg Acq; Event Scheduled out of View
 - ER #186: Confirmed event time change
 - ER #187: I-Chnl CRC errors (2 events)
 - ER #188: MOC W/S crash
 - ER #189: TRMM EPV Continuity failure
 - ER #190: Vector Problem at WSC; Late Acq



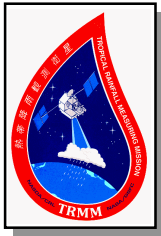
Flight Operations Summary

- Staffing
 - Stable; training continues for new personnel
 - » Three Console Analyst certifications expected



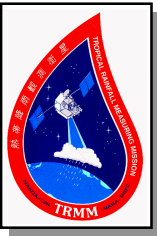
Flight Ops Summary

CSOC SPECIAL EVENTS FOR TRMM 2000													
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS
2	6	8	10	13	9	7	9						62
2a	1	1	2	1	1	1	2						9
2b	0	0	0	0	0	0	0						0
2c	0	0	0	0	0	0	0						0
3	2	1	0	1	2	2	2						10
3a	5	1	3	7	4	4	2						26
3b	3	1	2	4	4	3	3						20
3c	0	3	2	2	0	0	2						9
3d	1	0	1	0	0	0	0						2
3e	0	0	0	0	0	0	0						0
3f	6	1	3	3	5	2	2						22
4	3	3	0	3	3	5	0						17
4a	2	2	2	2	2	2	2						14
4b	1	2	2	1	2	1	1						10
4c	0	7	21	23	10	19	12						92
4d	11	0	4	1	4	2	4						26
4e	0	0	0	0	0	0	0						0
5	26	6	4	5	16	11	9						77
5a	0	0	4	0	1	4	2						11
5b	3	3	2	3	0	0	2						13
5c	0	0	0	0	0	0	0						0
8	0	0	0	0	0	0	0						0
8a	0	0	0	0	0	0	0						0
TOT:	70	39	62	69	63	63	54	0	0	0	0	0	420
LEGEND													
CSOC CATEGORIES			TRMM SUB-CATEGORIES AND EXAMPLES										
1	Targets of Opportunity		N/A										
2	S/C Maneuvers		DeltaVs (2) , 180° Yaw Maneuvers (2a) , 90° Yaws (2b) , Deep Space Cals (2c)										
3	Unplanned Events		Blind Acqs (3) , Patch Loads (3a) , Manual DS Ops - Blind Acqs, MI, H/W Problems (3b) , EPV Fail Ops (3c) , VIRS Reset Recoveries (3d) , Anomaly Recoveries (3e) , Generic Late Acqs - GCMRs and Manual DS Ops (3f)										
4	Customer Requests		PR (4) , VIRS (4a) , LIS (4b) , CERES (4c) , FSW (4d) , AETD (4e)										
5	Celestial Phenomena		VIRS Heater Ops (5) , Power Ops - Autospru, TSMs, C/D (5a) , UTCF / FS Ops (5b) , Leonids Ops (5c)										
6	Pre-Launch Testing		N/A										
7	L&IOC Operations		N/A										
8	EOL Operations		Delta-H Firings (8) , Reentry Maneuvers (8a)										



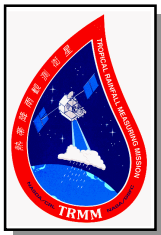
Training

- Now fully staffed with Console Personnel
 - Six analysts are now fully certified for CA and SA positions
 - Three additional personnel have completed the CA on-line tests and only require final skills catalog checkout for their certifications
- BSOCC summer intern also began rotating shiftwork in July



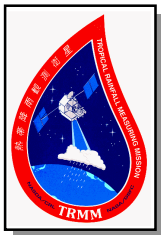
Thermal / Electrical Subsystems

- Thermal and Electrical subsystems remain nominal with no open issues



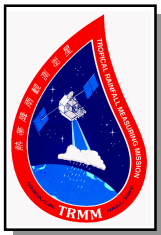
ACS Subsystem

- Writing to EEPROM
 - EEPROM Commits
 - » Annual S/C Mass Update to be performed later this week
 - » Correction for Magnetic Field Epoch (CCR #005) still open
- ACS Flight Software bug (CCR #053) - low priority at CCB
- ACS AETD determined MOI does not need to be updated (WR #007)
- New CCRs;
 - FSW to build new version of Table 61 to incrementally pitch the S/C while in SunAcq (CCR #70)
 - FSW will update table 85 to match new TDRS-8 continuity limits for other TDRSS (CCR #069)



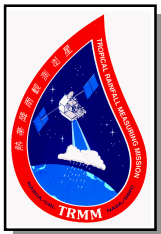
FDS/C&DH Subsystems

- UTCF adjustment was performed on 00-200
 - New UTCF value is 31535996.841932 sec
 - New FS value is x'7a2'
- Open Issues
 - Writing from RAM to EEPROM (CCR #034)
 - » New TSM table #21 and RTSs # 2, 3, 13, 14, and 15. Will be performed since CERES does not want to be turned off.
 - New on-board DS filter table to record ACE 8-Hz data (CCR #048)
 - Will work with FSW on no-clock software patch activities. (CCR #047)
- New CCRs;
 - Will build a new DS quota table (73) to reallocate CERES science memory to other instruments (CCR #071)



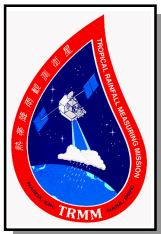
RCS Subsystem

- RCS performed 9 successful Delta-V maneuvers (#206 - #214)
- EOL worst case is **September, 2003**
 - Current fuel remaining is 549.146 kg
- No Open RCS Anomaly or Event Reports
- Upcoming Events
 - None



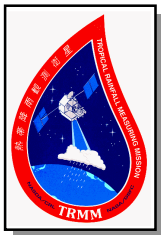
RF Subsystem

- 2 Generic Late Acquisitions (#63 & #64)
- Frequency offset Transponder #1 = **658.561** Hz (average)
- Frequency offset Transponder #2 = **-684.186** Hz (average)
- No open RF Anomaly or Event Reports
- Upcoming Events
 - Offset of transponder frequencies likely before end of year



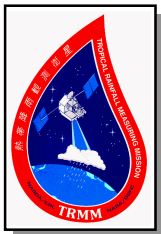
Power Subsystem

- PSIB auto-SPRU operations
 - Currently, Auto-SPRU is disabled
 - Monitor system with Code 563 close to Beta $\pm 58^\circ$
- Lowered C/D Level
 - 00-185 C/D Level was lowered from 1.025 to 1.010 to prevent the State of Charge counters from dropping too far below 100% at the end of day
 - When Auto-SPRU is enabled, the C/D Level will be raised



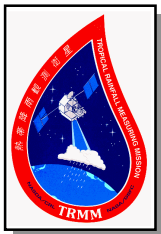
Deployables Subsystem

- -Y solar array drive temperature and behavior continues to be closely monitored
- Solar array drives and HGA continue to operate nominally
- No open issues other than to concentrate on array behavior and contingency training with all FOT members



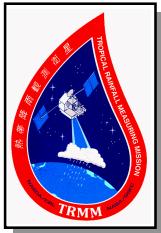
CERES Instrument

- DAP Telemetry Drop Out (Data Acquisition Processor) and Possible Failure (Anomaly #81)
 - Recovery to science collection is not likely, but Langley does *NOT* want to power it off
- Open Issues
 - DAP Telemetry Drop Out (Anomaly #81)
 - Adjust packet sizes in preparation for Data Storage memory reallocation
- Issues on Hiatus
 - Continuous Biaxial operations
 - DR on MP ground system to incorporate new CERES requirements



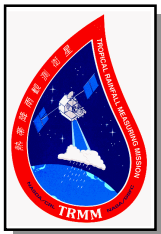
VIRS Instrument

- 2 Solar Calibrations were performed on 00-205
- Blackbody temperature is now being maintained between 8 °C and 16 °C
 - Widened Temperature Limits. Since the Power Supply temperatures increase several degrees when both heaters are ON. New lower limits appear to be working as the power supply temperature has remained at its normal level.



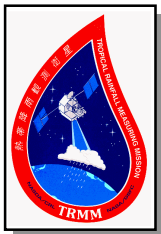
LIS Instrument

- Routine MSFC real-time command request performed on 00-195 (CR #410) to reduce packet sequence errors
- No open issues



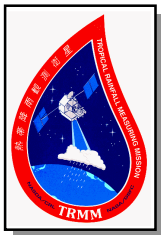
TMI / PR Instruments

- No concerns or open issues for TMI
- PR Activities:
 - No External Calibrations were conducted in July
- PR Open Issues
 - Frequency Agreement Renewal activities continue
 - » No reports from the EOC of new interference to PR in July



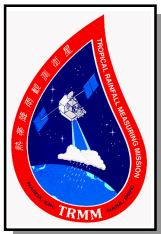
Ground System

- Ground Reference Images (GRIs) for ACS and S/C BPROM and EEPROM are up to date and verified on all three strings
- TSMs working with FOT to complete Security Scan vulnerabilities
 - Global directory and file privilege update was implemented on String-2 on 00-207 and 00-208
 - » Privileges will be similarly updated on Strings 1 and 3 following a two week checkout period
- New NCC Software Delivery completed on 00-199
- PTP-1 Power Supply replaced and operations returned to nominal configuration
- PDU Scan and Checkout performed on 00-210
- Request submitted for excess equipment from CGRO control center



Upcoming Activities

- 0-2 Months
 - Ensure FOT training remains top priority following recent attrition
 - Copy remaining RAM SCP changes to EEPROM
 - System Software Release 8.1 implementation
 - GITT Security Scan vulnerability closures
 - New FORMATS delivery which will incorporate new TDRS-8, I, J
 - New User Planning System (UPS) Release 13
 - Complete Final version of TRMM Continuous Risk Management Plan
 - Continue to close open CCRs, MOCRs, ERs, ARs, and MSR Action Items



Upcoming Activities

- 2-3 Months
 - Complete 2nd draft of TRMM End of Life and Controlled Reentry Plan
 - Begin testing and using the new TDRS-8
- 3-12 Months
 - Leonids Operations (11/2000)
 - Extended Mission Operations (1/2000)
 - Test, validate, and accept the new PACOR-A system
 - Commence DSN/GN FOT training
 - Testing of new PTP hardware and software deliveries
 - System Software Release 8.2 Delivery
 - Transponder Offset Activities